

CLAIMS

I Claim:

Claim 1 – A security cable device for a bicycle, comprising in combination:

a hollow elongated spring housing rigidly coupled to a rear portion of a first frame member of a bicycle such that said hollow elongated spring housing includes a first open end circumscribing an opening disposed at the rear portion of the first frame member and further includes a portion extending away from said first open end and extending tangentially along a second frame member of the bicycle and terminating to a second open end;

a spring disposed within said hollow elongated spring housing and having a first end and a second end such that said first end is disposed adjacent said first open end of said hollow elongated spring housing and said second end is disposed adjacent to and is removably coupled from said second open end of said hollow elongated spring housing;

a single length cable disposed within the first frame member of the bicycle and comprised of a second end removably coupled to said first end of said spring, and

said single length cable further comprised of an external cable portion externally extending from an opening disposed at a front portion of the first frame member and terminating to an opposite, first end of the cable such that said cable is extendible out of and retractable into said first frame member by pulling on and releasing tension on said external cable portion causing an extension and retraction of said spring for defining and extended and stowed position of the cable such that said external cable

portion has a length greater than a length of the spring such that said second end of said spring can be decoupled from said elongated spring housing and pulled through the second open end of said elongated spring housing a length greater than the spring length such that said first end of said spring can be decoupled from said second end of said cable for spring repair or replacement.

Claim 2 – The device of claim 1 wherein said first end of said single length cable includes a loop defining a looped end of said single length cable.

Claim 3 – The device of claim 2 further including a coupling means having a first member secured to a lock and a second member secured to the handlebar of the bicycle for coupling and decoupling said lock and said looped end of said single length cable to the handlebar of the bicycle when said single length cable is in the stowed position by locking the lock onto said looped end of said single length cable and coupling said first member, secured to said lock, to said second member secured to the handlebar of the bicycle such that said cable loops up from the lower tube and couples to the handlebar of the bicycle for forming a cable loop complementary in shape to other bicycle cables coupled to the handlebar of the bicycle.

Claim 4 – A bicycle and a security cable device, comprising in combination:

a lower tube having a front portion and a rear portion, a pair of spaced apart chain stay tubes disposed at the rear portion of the lower tube, and a transition tube member connecting the lower tube and the pair of spaced apart chain stay tubes;

a head connected to the front portion of the lower tube;

a handlebar operatively coupled to the head; and

a hollow elongated spring housing rigidly coupled to the rear portion of the lower tube and comprised of a first open end circumscribing an opening disposed proximate the rear portion of the lower tube and an elongated portion extending away from said first open end and extending tangentially along one of the pair of spaced apart chain stay tubes and terminating to a second open end;

a spring disposed within said hollow elongated spring housing and having a first end and a second end such that said first end is disposed adjacent said first open end of said hollow elongated spring housing and said second end is disposed adjacent to and removably coupled from said second open end of said hollow elongated spring housing;

a single length cable disposed within the lower frame member of the bicycle and comprised of a second end coupled to said first end of said spring and an external cable portion externally extending from an opening disposed proximate the front portion of the lower tube and terminating to an opposite, looped end of the cable such that said cable is extendible from and returnable to a stowed position in the lower tube and said hollow elongated spring housing by an extension and retraction of said spring, and

a coupling means having a first member secured to a lock and a second member secured to the handlebar of the bicycle for coupling and decoupling said lock and said looped end of said cable to the handlebar of the bicycle when said cable is in the stowed position by locking the lock onto said looped end of said cable and coupling said first member secured to said lock to said second member secured to the handlebar of the bicycle such that said cable loops up from the lower tube and couples to the handlebar of

the bicycle for forming a cable loop complementary in shape to other bicycle cables coupled to the handlebar of the bicycle.

Claim 5 – The bicycle and a security cable device of claim 4 wherein said external cable portion has a length greater than a length of the spring when said cable is in the stowed position such that said second end of said spring can be decoupled from said elongated spring housing and pulled through the second open end of said elongated spring housing a length greater than the spring length such that said first end of said spring can be decoupled from said second end of said cable for spring repair or replacement.

Claim 6 – A bicycle and a security cable device, comprising in combination:

- a upper tube having a front portion and a rear portion, a pair of spaced apart chain stay tubes disposed at the rear portion of the upper tube, and a transition tube member connecting the upper tube and the pair of spaced apart chain stay tubes;
- a head connected to the front portion of the upper tube;
- a handlebar operatively coupled to the head; and
- a hollow elongated spring housing rigidly coupled to the rear portion of the upper tube and comprised of a first open end circumscribing an opening disposed proximate the rear portion of the upper tube and an elongated portion extending away from said first open end and extending tangentially along one of the pair of spaced apart chain stay tubes and terminating to a second open end;
- a spring disposed within said hollow elongated spring housing and having a first end and a second end such that said first end is disposed adjacent said first open end of said hollow elongated spring housing and said second end is disposed adjacent to

and removably coupled from said second open end of said hollow elongated spring housing;

a single length cable disposed within the upper frame member of the bicycle and comprised of a second end coupled to said first end of said spring and an external cable portion externally extending from an opening disposed proximate the front portion of the upper tube and terminating to an opposite, looped end of the cable such that said cable is extendible from and returnable to a stowed position in the upper tube and said hollow elongated spring housing by an extension and retraction of said spring, and

a coupling means having a first member secured to a lock and a second member secured to the handlebar of the bicycle for coupling and decoupling said lock and said looped end of said cable to the handlebar of the bicycle when said cable is in the stowed position by locking the lock onto said looped end of said cable and coupling said first member secured to said lock to said second member secured to the handlebar of the bicycle such that said cable loops up from the upper tube and couples to the handlebar of the bicycle for forming a cable loop complementary in shape to other bicycle cables coupled to the handlebar of the bicycle.

Claim 7 – The bicycle and a security cable device of claim 6 wherein said external cable portion has a length greater than a length of the spring when said cable is in the stowed position such that said second end of said spring can be decoupled from said elongated spring housing and pulled through the second open end of said elongated spring housing a length greater than the spring length such that said first end of said spring can be decoupled from said second end of said cable for spring repair or replacement.